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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,761	01/05/2004	Yosef Kamir	2786/3	1676

7590 01/11/2005

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EXAMINER
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HINZE, LEO T

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/750,761	<b>Applicant(s)</b> KAMIR ET AL.	
	<b>Examiner</b> Leo T. Hinze	<b>Art Unit</b> 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 28 JJA 1/10/05*
- 4) ☒ Claim(s) 1,3,5-7,10,11,13-21 and 23-28 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-21 and 23-28 is/are allowed.
- 6) ☒ Claim(s) 1,3,6,7,10,11 and 14 is/are rejected.
- 7) ☐ Claim(s) 5 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2854

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on 1 November 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US 6,686,941 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2854

4. Claims 1, 3, 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura, US 4,588,990 (Tamura) in view of Yamamoto et al., US 6,381,428 (Yamamoto).

a. Regarding claim 1:

Tamura teaches a display system comprising: a display screen including one endless imaging belt (11, Fig. 1); a printing means including a toner reservoir (12, Fig. 1) and writing means (7, Fig. 1), said toner reservoir being configured for containing a toner (5, Fig. 1), said toner reservoir being associated with said writing means, said writing means being configured for a fusionless transfer of said toner from said toner reservoir onto said one endless imaging belt, such that said printing means forms a non-fused image on said one endless imaging belt (col. 3, lines 23-67); an erasing means for erasing said images from said one endless imaging belt (col. 5, lines 47-50); and a drive means (14, 17, 18, 19, Fig. 1) operationally connected to said one endless imaging belt for moving said one endless imaging belt from a printing position to a viewing position.

Tamura does not teach at least three toner reservoirs and three writing means, each of said toner reservoirs being configured for containing a different color toner, each of said toner reservoirs being associated with one of said writing means.

Yamamoto teaches an image forming system including at least three toner reservoirs (5a, 5b, 5c, 5d, Fig. 1) and three writing means (4a, 4b, 4c, 4d, Fig. 1), each of said toner reservoirs being configured for containing a different color toner, each of said toner reservoirs being associated with one of said writing means (Fig. 1). Yamamoto teaches that such a system is advantageous for producing high picture quality to produce photo outputs (col. 1, lines 65-66).

Art Unit: 2854

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tamura to include at least three toner reservoirs and three writing means, each of said toner reservoirs being configured for containing a different color toner, each of said toner reservoirs being associated with one of said writing means for printing color images, because Yamamoto teaches that such components that allow color images to be printed are advantageous for producing high picture quality to produce photo outputs.

b. Regarding claim 3, the combination of Tamura and Yamamoto teaches all that is claimed as discussed in the rejection of claim 1 above. Tamura also teaches an interface control unit coupled to at least said display screen; and processing means communicating with said interface control unit to control the display of said images (Fig. 5).

c. Regarding claim 6, the combination of Tamura and Yamamoto teaches all that is claimed as discussed in the rejection of claim 1 above. Tamura also teaches a substantially transparent protective screen placed in front of said display screen (16, Fig. 1).

d. Regarding claim 14, the combination of Tamura and Yamamoto teaches all that is claimed as discussed in the rejection of claim 3 above. Tamura also teaches wherein said interface control is coupled to said drive means (col. 6, lines 20-25).

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura in view of Yamamoto as applied to claim 1 above, and further in view of Zur, US 5,289,214.

The combination of Tamura and Yamamoto teaches all that is claimed as discussed in the rejection of claim 1 above, except wherein said one endless imaging belt is an endless dielectric imaging belt.

Art Unit: 2854

Zur teaches an apparatus for information transfer including a dielectric element and generally non-image-wise charge service, including using a dielectric element (80, Fig. 6A) as a rewritable image display device (col. 7, line 50 through col. 8, line 40). Zur also teaches that dielectrics and photoconductors are exchangeable equivalents (col. 2, lines 8-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Tamura et al. to use a dielectric member instead of a photoconductive member for writing images, because Zur teaches that dielectric and photoconductive members are equally acceptable as display screens.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura in view of Yamamoto as applied to claim 1 above, and further in view of Suzuki et al., US 6,112,046 (Suzuki).

a. Regarding claim 10:

The combination of Tamura and Yamamoto teaches all that is claimed as discussed in the rejection of claim 1 above, Tamura also teaches wherein said erasing means comprises: static eliminators for removing said different color toner from said one endless imaging belt (the image is electrostatic col. 4, lines 30-34, and the image is erased, col. 5, lines 47-50).

The combination of Tamura and Yamamoto does not teach a receptacle for receiving and storing the removed toner.

Suzuki teaches at least one receptacle for said at least one display screen for receiving and storing the removed toner (6, Fig. 3), and that such a toner recycling apparatus provides a small size, low cost image forming apparatus (col. 2, lines 55-57).

Art Unit: 2854

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Tamura to store removed toner for reuse, because Suzuki teaches a recycling apparatus that provides for a small size, low cost image forming apparatus, and one having ordinary skill in the art would recognize the advantages of recycling toner, such as saving money by reusing toner and eliminating the need for storage and disposal of used toner.

b. Regarding claim 11, the combination of Tamura, Yamamoto, and Suzuki teaches all that is claimed as discussed in the rejection of claim 11 above. Tamura also teaches wherein said static eliminators comprise active shockless static eliminators (the device of Tamura actively erases the electrostatic image).

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1, 3, 6, 7, 10, 11, 13 and 14 are have been considered but are moot in view of the new ground(s) of rejection.

#### ***Allowable Subject Matter***

8. Claims 15-21 and 23-28 are allowed.

9. Claims 5 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is an examiner's statement of reasons for allowance:

Regarding claim 15, the prior art of record does not teach or render obvious a method for producing at least one display image having all of the structure and steps as claimed, including the step

Art Unit: 2854

of moving a dual purpose screen having a substantially white reflective diffusing portion and a substantially transparent portion behind said at least one display screen.

Regarding claim 27, the prior art of record does not teach or render obvious a display system having all of the structure as claimed, including at least three nested endless imaging belts.

Regarding claim 28, the prior art of record does not teach or render obvious a method for displaying a color image having all of the steps and structure as claimed, including providing a printing means supported by a roller track and moving said printing means longitudinally on said roller track.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from



Art Unit: 2854

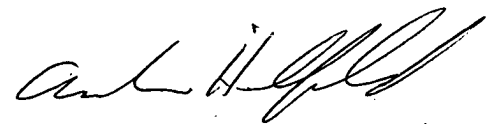
the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo T. Hinze  
Patent Examiner  
AU 2854  
7 January 2005



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